


Please replace the paragraph beginning at page 16, line 1, with the following, rewritten paragraph:

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-Further, FIG. 7 shows the release of H₂O and OH from the SiO₂ film deposited on the Si substrate at a substrate temperature of 400°C and a plasma power of 100W for a case in which the ratio of N₂O with respect to SiH₄ in the gaseous source is set to 10. In this case, the SiO₂ film obtained as a result of the plasma CVD process has a refractive index of about 1.5. In contrast, it should be noted that the SiO₂ film obtained in FIG. 5 has a refractive index of about 1.47. Further, the SiO₂ film of FIG. 3 shows a refractive index of about 1.45.--


Please replace the paragraph beginning at page 16, line 12, with the following, rewritten paragraph:

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--As can be seen in FIG. 7, the amount of H₂O and OH incorporated into the SiO₂ film is reduced further as compared with the case of FIG. 5. It is believed that the foregoing decrease of H₂O and OH content in the SiO₂ film observed in the case of FIG. 7 is caused by the increased amount of Si-H bond in the SiO₂ film.--


Please replace the paragraph beginning at page 16, line 27, with the following, rewritten paragraph:

 --FIG. 9 shows a differential in which the result of FIG. 3 is subtracted from the result of FIG. 4. As already explained with reference to FIG. 4, the SO_2 film deposited under the plasma power of 200W contains a large amount of H_2O and OH.--

Please replace the paragraph beginning at page 17, line 9, with the following, rewritten paragraph:

 --Further, FIG. 12 shows a differential in which the result of FIG. 3 is subtracted from the result of FIG. 7 in which the deposited SiO_2 film has a refractive index of 1.5. In this case, the amount of release of H_2O and OH is reduced further. In contrast, FIG. 13 shows the case in which the result of FIG. 3 is subtracted from the result of FIG. 8 in which the deposited SiO_2 film has a refractive index of 1.63. In this case, the amount of H_2O and OH incorporated into the SiO_2 film starts to increase again.--

Please replace the paragraph beginning at page 20, line 8, with the following, rewritten paragraph:

 --Next, in the step of FIG. 15F, an SiO_2 film 14 is deposited on the structure of FIG. 15E by a plasma CVD process with a thickness of about 20nm. Thereby, the deposition of the SiO_2 film 14 is conducted in a parallel-plate-type plasma CVD

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apparatus under a pressure of 3.0 Torr while setting the substrate temperature to 400°C and the high-frequency power to 50W. During the deposition of the SiO₂ film 14, SiH₄ and N₂O are supplied to the reaction chamber of the plasma CVD apparatus as source materials together with an N₂ carrier gas with a flow rate of 10cc/min and 400cc/min respectively. The flow rate of the N₂ carrier gas may be set to 2000 cc/min. The plasma CVD apparatus may have an electrode gap of 300 Mil.--

Please replace the paragraph beginning at page 27, line 9, with the following, rewritten paragraph:

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--Thus, the deposition of the oxide film 29 is conducted in a parallel-plate-type plasma CVD apparatus at a substrate temperature of 400°C while setting the high-frequency power to 50W. During the deposition of the oxide film 29, the internal pressure of the reaction chamber of the plasma CVD apparatus is set to 3.0 Torr and SiH₄ and N₂O are supplied as the gaseous source together with an N₂ carrier gas with respective flow rates of 10 cc/min and 400 cc/min. The flow rate of the N₂ carrier gas is set to about 2000 cc/min. Similarly as before, the gap between the electrodes of the plasma CVD apparatus is set to 300 Mil. As the formation of H₂O in the plasma is suppressed in the plasma CVD process conducted under the foregoing conduction, the SiO₂ film 29 thus obtained typically has an H₂O content of 1.1 wt% or less and a refractive index of about 1.47.--
